

CLAIMS

What is claimed is:

1 1. A method for reducing latency while handling network accounting records
2 using an aggregator, comprising:
3 (a) receiving records indicative of network events, wherein the records are
4 received in an aggregator for the purpose of aggregating the records; and
5 (b) generating a command in response to the receipt of the records by the
6 aggregator;
7 (c) wherein services are rendered in response to the command with minimal
8 latency caused by the aggregator.

1 2. The method as recited in claim 1, wherein the command includes a start
2 command that is generated immediately before the aggregator generates a
3 memory state in response to the receipt of records.

1 3. The method as recited in claim 1, wherein the command includes a start
2 command that is generated immediately before other operations are
3 performed by the aggregator in response to the receipt of records.

1 4. The method as recited in claim 1, wherein the command includes a start
2 command that is sent immediately to a receiving device or module in a data
3 collection system of which the aggregator is a component.

1 5. The method as recited in claim 4, wherein the start command is sent over a
2 network utilizing at least one of UDP/IP, TCP/IP, and IPX protocol.

1 6. The method as recited in claim 1, wherein the records are received over a
2 network utilizing at least one of UDP/IP, TCP/IP, and IPX protocol.

1 7. The method as recited in claim 6, wherein the records are received from
2 information sources.

1 8. The method as recited in claim 1, and further comprising determining
2 whether any of the records is a signal, wherein the aggregation is evaluated in
3 immediate response to the receipt of the signal to further minimize latency.

1 9. A computer program product for reducing latency while handling network
2 accounting records using an aggregator, comprising:
3 (a) computer code for receiving records indicative of network events, wherein
4 the records are received in an aggregator for the purpose of aggregating the
5 records; and
6 (b) computer code for generating a command in response to the receipt of the
7 records before work is done by the aggregator;
8 (c) wherein services are rendered in response to the command with minimal
9 latency caused by the aggregator.

1 10. A system for reducing latency while handling network accounting records
2 using an aggregator, comprising:
3 (a) logic for receiving records indicative of network events, wherein the records
4 are received in an aggregator for the purpose of aggregating the records; and
5 (b) logic for generating a command in response to the receipt of the records
6 before work is done by the aggregator;
7 (c) wherein services are rendered in response to the command with minimal
8 latency caused by the aggregator.

1 11. A method for reducing latency while handling network accounting records
2 using an aggregator, comprising:

3 (a) receiving records indicative of network events, wherein the records are
4 received in an aggregator for the purpose of aggregating the records; and
5 (b) sending a command to a receiving device or module in a data collection
6 system of which the aggregator is a component in response to the receipt of
7 the records by the aggregator;
8 (c) wherein services are rendered in response to the command with minimal
9 latency caused by the aggregator.

1 12. A method for reducing latency while handling network accounting records
2 using an aggregator, comprising:

3 (a) receiving records indicative of network events, wherein the records are
4 received in an aggregator for the purpose of aggregating the records; and
5 (b) evaluating the records in immediate response to the receipt of the records to
6 determine whether an update or stop command is necessary; and
7 (c) wherein minimal latency is caused by the aggregator.

1 13. The method as recited in claim 12, and further comprising generating the
2 update or stop command immediately in response to the receipt of the
3 records if the update or stop command is necessary.

1 14. The method as recited in claim 12, wherein the command is sent immediately
2 to a receiving device or module in a data collection system of which the
3 aggregator is a component.

1 15. The method as recited in claim 14, wherein the command is sent over a
2 network utilizing at least one of UDP/IP, TCP/IP, and IPX protocol.

1 16. The method as recited in claim 12, and further comprising determining
2 whether any of the records is a signal, wherein the aggregation is evaluated in
3 immediate response to the receipt of the signal.

- 1 17. The method as recited in claim 12, wherein the evaluation of the records
- 2 includes determining whether a threshold is met.
- 1 18. The method as recited in claim 17, wherein the threshold is user-configured.
- 1 19. The method as recited in claim 18, wherein the aggregation is updated by
- 2 marking one of the records that was last sent if an update threshold is met.
- 1 20. The method as recited in claim 18, wherein the aggregation is stopped by
- 2 resetting a memory state associated with the records if a stop threshold is
- 3 met.
- 1 21. The method as recited in claim 18, wherein the aggregation is evaluated
- 2 periodically in addition to being updated in immediate response to the receipt
- 3 of the signal.
- 1 22. A computer program product for reducing latency while handling network
- 2 accounting records using an aggregator, comprising:
 - 3 (a) computer code for receiving records indicative of network events, wherein
 - 4 the records are received in an aggregator for the purpose of aggregating the
 - 5 records; and
 - 6 (b) computer code for evaluating the records in immediate response to the
 - 7 receipt of the records to determine whether an update or stop command is
 - 8 necessary;
 - 9 (c) wherein minimal latency is caused by the aggregator.
- 1 23. A system for reducing latency while handling network accounting records
- 2 using an aggregator, comprising:
 - 3 (a) logic for receiving records indicative of network events, wherein the records
 - 4 are received in an aggregator for the purpose of aggregating the records; and

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5 (b) logic for evaluating the records in immediate response to the receipt of the
6 records to determine whether an update or stop command is necessary;
7 (c) wherein minimal latency is caused by the aggregator.

1 24. A method for reducing latency while handling network accounting records
2 using an aggregator, comprising:
3 (a) receiving records indicative of network events, wherein the records are
4 received in an aggregator for the purpose of aggregating the records; and
5 (b) generating an update or stop command immediately in response to the receipt
6 of the records if the update or stop command is necessary;
7 (c) wherein minimal latency is caused by the aggregator.

1 25. A method for reducing latency while handling network accounting records
2 using an aggregator, comprising:
3 (a) receiving records indicative of network events, wherein the records are
4 received in an aggregator for the purpose of aggregating the records; and
5 (b) sending an update or stop command to a receiving device or module in a data
6 collection system of which the aggregator is a component in immediate
7 response to the receipt of the records by the aggregator;
8 (c) wherein minimal latency is caused by the aggregator.

1 26. A method for reducing latency while handling network accounting records
2 using an aggregator, comprising:
3 (a) receiving records indicative of network events, wherein the records are
4 received in an aggregator for the purpose of aggregating the records; and
5 (b) generating a command in response to the receipt of the records by the
6 aggregator;
7 (c) wherein services are rendered in response to the command within a
8 predetermined amount of time.